

REMARKS

I. Status of the Claims

Applicant submits this Amendment in reply to the Office Action dated February 18, 2009. Claims 1-22 are the pending, non-withdrawn claims in this application, with claim 1 being independent. By this Amendment, Applicant has amended claims 1 and 9, canceled claims 5, 7, 8, 11, 13, and 23-78, without prejudice or disclaimer, and added new claims 79-101. The originally-filed specification, claims, abstract, and drawings fully support the subject matter of the amended and new claims, and no new matter has been entered.

In the Office Action, claims 1-14 and 16-21 are rejected under 35 U.S.C. §102(b) as being anticipated by PCT Application Publication No. WO 97/12557 to Kelleher ("*Kelleher*"). Moreover, claims 1, 14, 15, and 22 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,063,098 to Houser et al. ("*Houser*"). In so far as the Examiner deems these rejections to apply to the claims as amended, Applicant respectfully traverses for at least the following reasons.

II. Independent Claim 1 and Dependent Claims 2-4, 6, 9-10, 12, and 14-22

Independent claim 1 recites, among other things, an end effector apparatus comprising a deflecting mechanism including a proximal portion and a distal portion, an end effector, a first actuator coupled to the deflecting mechanism, and a second actuator coupled to the end effector assembly. A proximal opening and a side gap is defined by the deflecting mechanism, "wherein each of the first and second actuators extends through the proximal opening and selectively extends through the side gap."

Applicant respectfully traverses the Section 102 rejection of independent claim 1. For anticipation, each and every feature recited in a claim must be found in one item of prior art, either expressly or inherently, and arranged in the item of prior art in the same way as it is claimed. See MPEP 2131 ("The elements must be arranged as required by the claim, ... In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."). That is, the identical invention must be shown in as complete detail as is contained in the claim. See, e.g., Brown v. 3M, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) ("To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim.") Richardson v. Suzuki Motor Co., Ltd., 868 F.2d 1226, 1236, 9 USPQ2d 1913 (Fed. Cir. 1989).

In this case, no embodiment of *Kelleher* and *Houser* discloses an apparatus defined in claim 1. For example, *Kelleher* and *Houser* fail to disclose or suggest an end effector apparatus comprising a deflecting mechanism including a proximal portion and a distal portion, an end effector, a first actuator coupled to the deflecting mechanism, and a second actuator coupled to the end effector assembly, the deflecting mechanism defining a proximal opening and a side gap, "wherein each of the first and second actuators extends through the proximal opening and selectively extends through the side gap."

In rejecting independent claim 1 based on *Kelleher*, the Office Action points to Figs. 1-7 and 38 of *Kelleher* and appears to rely on flexible tube 88 as allegedly corresponding to the claimed deflecting mechanism, effector assembly 66 as allegedly corresponding to the claimed end effector assembly, and steering wire 70 as allegedly corresponding to the claimed first actuator. (Office Action at p. 2.) In addition, the

Office Action appears to rely on control wire 84 as allegedly corresponding to the claimed second actuator and angled aperture 182 as allegedly corresponding to the claimed side gap. (Office Action at p. 2.) Even assuming the Office Action's characterizations are correct, which Applicant does not concede, *Kelleher* fails to teach or suggest that "each of the first and second actuators extends through the proximal opening and selectively extends through the side gap," as recited in claim 1. In contrast, and as shown in Figs. 4 and 5 of *Kelleher*, for example, the *Kelleher* device includes a coaxial actuating assembly 170 "comprised of hollow tube 86 and control wire 84" (allegedly corresponding to the first actuator). Control wire 84 is "slidably disposed within the lumen of hollow tube 86....The distal end of control wire 84...is fixedly disposed in the proximal end of pushrod 178." (*Kelleher*, pg. 20, lines 2-3 and lines 6-11.) Moreover, Fig. 5 discloses only "steering wire 70...exit[ing] the lumen of flexible tube 88" though angled aperture 182 (allegedly corresponding to the claimed side gap), with no teaching or suggestion of control wire 84 exiting angled aperture 182. (*Kelleher*, pg. 20, lines 21-22.)

In regards to *Houser*, the Office Action points to Figs. 1-3 and appears to rely on non-articulating portion 184 as allegedly corresponding to the claimed proximal portion of the deflecting mechanism, movable portion 182 as allegedly corresponding to the distal portion of the deflecting mechanism, and wires 145 and 146 as allegedly corresponding to the claimed first actuator. Even assuming the Office Action's characterizations are correct, which Applicant does not concede, *Houser* fails to teach or suggest that "each of the first and second actuators extends through the proximal opening and selectively extends through the side gap," as recited in claim 1. No portion

of non-articulating portion 184 and movable portion 182 of the *Houser* device includes a side gap, let alone a side gap having wires 145 and 146 extending therethrough.

For at least these reasons, *Kelleher* and *Houser* do not anticipate claim 1, and Applicant respectfully requests withdrawal of the Section 102 rejection based on *Kelleher* and *Houser*.

Each of claims 2-4, 6, 9-10, 12, and 14-22 depends either directly or indirectly from claim 1 and is patentable for at least the same reasons. In addition, the dependent claims recite unique combinations that are neither taught nor suggested by the cited reference, and therefore also are separately patentable for these recitations.

III. New Claims

A. Independent Claim 83 and Dependent Claims 95 and 101

Independent claim 83 recites, among other things, an end effector apparatus comprising a deflecting mechanism including a proximal portion and a distal portion, and an end effector. A first actuator is coupled to the deflecting mechanism, “wherein the first actuator does not extend through a side gap defined by the deflecting mechanism when a longitudinal axis of the distal portion is substantially collinear with a longitudinal axis of the proximal portion, and the first actuator extends through the side gap when the longitudinal axis of the distal portion is not substantially collinear with the longitudinal axis of the proximal portion.”

The cited references fail to disclose or suggest the apparatus defined in claim 83. In contrast, and as shown in Figs. 4, 5, and 7 of *Kelleher*, for example, steering wire 70 (allegedly corresponding to the first actuator) exits the angled aperture 182 (allegedly

corresponding to the claimed side gap) when a distal portion and a proximal portion of flexible tube 88 (allegedly corresponding to the claimed deflection mechanism) are substantially collinear.

Although of different scope than independent claim 83, dependent claims 95 and 101 patentably distinguish from the cited references for at least the same reasons as independent claim 83.

B. Independent Claim 92

Independent claim 92 recites, among other things, an end effector apparatus comprising a first actuator coupled to a deflecting mechanism, the deflection mechanism having a proximal portion, a distal portion, and “a pivot configured such that the distal portion pivots relative to the proximal portion,” and “a side gap defined by the deflecting mechanism, wherein the first actuator selectively extends through the side gap.” At least these claimed features are not disclosed or suggested by the cited references.

The Office Action contends that *Kelleher* teaches a pivot that is “defined by the portion of the device between a side gap 182 and distal element 72.” (Office Action at p. 2.) However, *Kelleher* merely discloses that pulling steering wire 70 “cause[s] flexible tube 88 to bend” (*Kelleher*, pg. 21, lines 25-26), and therefore, contrary to the Office Action’s assertions, fails to teach or suggest a deflection mechanism including a pivot. In addition, the steering wire 70 of *Kelleher* does not “selectively” extend through aperture 182. Wire 70 always extends through aperture 182.

C. Dependent Claims 79-82, 84-91, 93, 94, and 96-100

Each of claims 79-82, 84-91, 93, 94, and 96-100 depends either directly or indirectly from claims 1, 83, and 92 and is patentable for at least the same reasons. In addition, the dependent claims recite unique combinations that are neither taught nor suggested by the cited reference, and therefore also are separately patentable for these recitations.

For example, *Kelleher* and *Houser* fail to disclose or suggest that “the side gap includes a first gap defined by the proximal portion and a second gap defined by the distal portion” (claims 80, 89, and 98), that “each of the first and second actuators selectively extends through the first and second gaps” (claims 81, 90, and 99), and that “a pivot is between the first gap and the second gap and between the proximal portion and the distal portion” (claims 82, 91, and 100).

IV. Conclusion

The Office Action contains characterizations of the claims and the related art with which Applicants do not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action. In view of the foregoing amendments and remarks, this claimed invention is neither anticipated nor rendered obvious in view of the prior art reference cited against this application. Applicant therefore respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.


Please grant any extensions of time required to enter this Response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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By



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